

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED
IN 1861

DEVOTED EXCLUSIVELY TO PROGRESSIVE BEE CULTURE.

Vol. XVIII.

Chicago, Ill., March 22, 1882.

No. 12.

THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,

EDITOR AND PROPRIETOR,

974 WEST MADISON ST., CHICAGO, ILL.

TERMS OF SUBSCRIPTION:

WEEKLY—(52 numbers) \$3 a year, in advance.
Three or Six Months at the same rate.

Entered at Chicago post office as second class matter.

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The Cheap Queen Traffic Again.

The communication from Mr. W. Z. Hutchinson, on page 183, on this subject, calls for a few remarks.

Our correspondent certainly misunderstood our expression, which he attempts to reproduce in his first paragraph. Had he copied the sentence entire, it would give the impression that where one might economize more, scores of prudent breeders would far exceed Mr. Salisbury's expenses. Not only have we cited several cases where experienced and extensive breeders have found the cheap queen traffic undesirable, but in this issue we publish a letter (on page 187) from another.

We have carefully read our article through to find the word "stripes" which our correspondent quotes upon us—it is not there, but, instead, in our closing paragraph we said the "bee-keepers want better stock, more honey, longer-lived bees, and certain profits." The matter of stripes was certainly and purposely omitted, for the "best bees" will have just the requisite number, whether it be one or a dozen. As we have understood the matter, queens are not tested for stripes alone, but for the best business qualities, and if this object is not kept in view in testing, why, untested queens might fill the bill for all but stripes.

Nor did we say anything about "hybrid queens," as charged in the third paragraph given, but "worthless trash" is what we spoke of, and many queens sent out, which throw three-banded workers may be quite as worthless as many which show not one band plainly. But when a

"tested" queen is bought or sold, it is supposed her progeny will prove among the best for all desirable qualities, as well as possess the "three bands," which are only a "test of purity," or pure mating.

The correspondent's citation of the case of Dr. J. P. H. Brown establishes no point, except that the Doctor, as we all know, is an honest, conscientious gentleman, who would not send out any inferior stock, if he knew or suspected it to be such, for any price; and further, he states in his circular that all his queens are reared from imported stock. They are not reared from "dollar" queens.

We do not wish to controvert anything in the sixth paragraph, nor in either of the succeeding ones, except where "stripes" are unfortunately and persistently attributed to us.

Again we repeat, the bee-keepers of America want the "best bee," and to this end all bees should be tested before leaving the hands of the breeder.

☞ "The Oriental Casket," published at 912 Arch St., Philadelphia, Pa., is a literary gem. The March number is full of things both interesting and useful. In appearance it is elegant; in price moderate; in all things it is a credit to art, and a pleasure to the reader.

Flower Shows in England.—"Flower Shows," says the *Gardeners' Chronicle*, "have become everywhere local institutions; they teach and they expand ideas; they promote that contact amongst horticulturists of all sections that was previously wanting, and have and are doing a power of good." The love for flowers is now universal. So says *Vick's Monthly*. Bee shows will soon become as popular as flower shows in Great Britain.

Conflicting Theories of Bee-Keepers.

Mr. Jacob Spence, of Toronto, Canada, wishes a formulation of the various theories, now so conflicting, into creeds, so that the less advanced bee-keeper may have certain landmarks which he can keep in view while acquiring a knowledge of the more intricate details of the business. Below will be found his views upon the subject, and a call for our commitment, which we cheerfully respond to:

To some of us it is distressingly bewildering to find so many directly conflicting theories held by those who ought to be entitled to be looked up to as safe instructors. I think, too, that one very good way of bringing out truth is by clear statement of consistent theory—fairly founded on well ascertained facts and experiences. There are many interesting minor methods of detail, on which no doubt many various ways of working may be almost equally successful in bee increase and honey production—but, then, to keep the bees alive must be taken as the vital one thing needful.

Safe wintering and spring dwindling seem closely connected (or disconnected), and now to find out certain how to secure the one and prevent the other beyond ordinary peradventure, is where the real difficulty comes in. To know the cause (beyond doubt, of course), would be the proper key to the "how to prevent the dreadful spring dwindling;" and to really know the needful conditions of safe wintering, would go far toward this fulfillment. Here, then, would it not be especially important to make out very distinctly, particularly on these two points, how far all reputed orthodox authorities agree, and set down what can so be taken as fully settled creed, requiring little if any further discussion, but decidedly correct, and as such to be propounded to disciples as being thus far no longer doubtful? My idea is in this way to transfer as much as possible (especially in essentials) from the domain of the dubious into that of knowledge, and then proceed on this line.

I can only claim to class as a "novice" engaged in making experiments, results of which I may sometime deem worthy to communicate, but would much prefer to have less experimenting needful. This, it seems to me, should be accomplished less problematically, as well as less expensively, by utilizing confirmed conclusions and experiences, such as might be looked for from the fathers in the fascinating art.

I do earnestly wish, Mr. Editor, that yourself, and more of your very able correspondents, would turn more to these two vital parts of the programme. Do let us have fixed (not conflicting) creed on the ways and means of preserving the precious life of the "coming bee."

Bee-keeping, as an art or profession, is yet in its infancy, and the creeds to

be determined are proportioned to the magnitude of the business. Were wintering the *only* problem to be solved, it would have been satisfactorily settled long ago; but scores of questions have been constantly arising, some of greater and others of lesser importance, and each claiming more or less the attention of all. Again, these experiments and results are all conducted from different standpoints, and reached through various channels, and hence diverse convictions are reached, and each as logical as the others.

Could nature and the variations of winter be controlled by artificial means as easily as can be the certainty of honey flow in summer, then the success of one winter's experiments can be duplicated the next; but until then, for any man to formulate his theories into a creed, or the majority of his successes into an invariable doctrine, would be to stamp him as an egotist, and bring disaster on his followers.

We are reaching results quite rapidly, and many important questions are settling in convictions; but to arrive at harmonious conclusions, on all the main topics, will be impossible, owing to the vast extent of country and difference of climate involved, as well as different phases of human nature to be drifted into one channel. More unanimity of thought on very many questions is desirable, but time will be required, and a convincing need of such unanimity, before it will be reached.

We are glad Mr. Spence is moved by the spirit of experiment, and is himself assisting to overcome some of the obstacles to uniform success, but in many things he will find that a creed which may be life-saving in his extreme latitude, would be as certain to work destruction further south or west. Still, it is none the less his imperative duty to investigate, as his own success depends in a great measure upon the modification he may make in the creeds of others.

Mr. W. C. Barry, of Mount Hope nurseries, Rochester, N. Y., has our thanks for a neatly printed pamphlet containing his two essays on "Ornamental Planting" and "Native Fruits," both of which we have read with much pleasure and profit.

No. 2 of the *California Apiculturist* has come to hand with an additional 4 pages, making 12 in all.

"Miner" Points.—In the *Home and Science Gossip*, of Rockford, Ills., Mr. F. M. Miner writes as follows:

In the *BEE JOURNAL*, July 6, there is an ebullition of spleen, ignorance and self-conceit from one Robinson. Among other silly things he says he knows how to winter bees—snow excludes air; and Mr. Newman has sent his trash over the wide world to the disgrace of American prestige, and excluded any reply. Some of us ought to be in the insane asylum, claiming to be authorities while we differ radically on essentials.

We are astonished at the language used by Mr. Miner. The facts are that he sent us a communication last fall, and we put it into our "correspondence drawer," without reading, awaiting its selection to go into the *BEE JOURNAL*. Some time after he wrote us that the editor of the *Guide* wanted him to write for it, and unless we could print it soon, he would be glad to have it to send to the *Guide*. As we were crowded with matter, and our compositors could not "set up" Mr. M.'s articles until they were copied, and as we were too busy to do so, at the "rush" at the end of the year, we at once sent the article to the *Guide*, as requested, without ever having read it. Mr. M.'s strong language is, therefore, wholly uncalled for.

During all the winter months we have a large drawer full of "communications," and another full of "letters" in waiting, all the time, and from this "store," we select such as we deem best to give our readers a savory meal each week. We are sorry if any should feel aggrieved, but cannot expect to please all. We shall, however, continue to do our best to serve up a good meal to those who sit at our table—the *BEE JOURNAL*.

The editor of the Terrell, Texas, *Knight*, after mentioning the *BEE JOURNAL*'s recent change to 16 pages, adds: "The change has added to its prosperity and popularity. Its field of influence has been extended, and the industry it ably represents has been greatly advanced by the weekly publication." The *Knight* has our thanks for its very kind notice. To advance the industry of bee-keeping is our aim, on every occasion, and by every means at our command.

The *New England Bee-Journal* has again made its appearance, having been suspended from November to March. It is now expected to appear monthly, if sufficient support shall warrant it.

Bee-Keeping in Florida.

Mr. W. S. Hart, Vice President of the National Society for Florida, has sent us a copy of the *Florida Agriculturist*, which contains his "address to the Bee-Keepers' and Fair Directors of the State of Florida," advocating more and larger premiums for bees and honey at the next State Fair. Mr. Hart says that since its publication \$27.50 has been added to the prizes for honey.

Having lately received the premium list for the State Fair, I have gone carefully over it, and can say that I not only have no fault to find with the awards there offered, but on the contrary consider every one well and wisely placed. Yet it seems to me that one of our rural industries that, with a little encouragement may greatly surpass in importance to the State, some for which liberal premiums are offered in the list, is sadly neglected. I refer to the bee-keeping interest, which includes the production of honey and wax, the raising of early queens for the northern beekeepers, and the supplying of bees by the pound to replace those lost during the cold winters of the North. To be sure, there is a "Department O, for Poultry, Bees and Rabbits," but with seventy dollars offered for poultry, I do not see the first cent offered for bees. In "Department E, Table Luxuries," we find No. 12.—best specimen Florida honey \$3.00. Also, No. 42.—best home made vinegar of any kind \$1.00." Those two items afford the only chances for the bee-keeper to win a prize, and they together amount to \$4.00. As the reason for this lack of encouragement probably rests more with the bee-keepers themselves, in not making known the importance of their industry, than with the Directors of the Exposition, I now take the liberty of presenting a few facts and figures to show that bees and their productions are, to say the least, worthy of as much consideration as poultry.

Mr. Thomas G. Newman, editor of the *AMERICAN BEE JOURNAL*, a large and handsome weekly, published at Chicago, Ill., in a late issue called for reports from the bee-keepers of the country, stating their success during the present year. In No. 41, issued Oct. 12th, is given a tabulated statement of the returns as far as received. The footings are as follows: colonies in the spring 137,636; fall 235,510; average increase 71 per cent. Extracted honey 5,477,176 pounds; comb honey 3,990,446 pounds, giving a total of 9,467,622 pounds, or an average of 69 pounds to the colony. Florida's share in this list so far as reported is, colonies in the spring, 2,354, in the fall 4,712; per cent. of increase 100. Extracted honey produced, 167,918 pounds; comb honey, 19,734 pounds; average per colony, 84 pounds. In commenting on these results, Mr. Newman remarks:—"There are in America about 3,000,000 colonies of

bees, but our reports are from less than a quarter of a million, or one-twelfth of the whole. If the one-twelfth that are reported are a fair average of the whole, then the crop of American honey for 1881 amounts to 120,000,000 pounds. If we call it only a hundred millions, it is worth \$15,000,000. Surely the industry is of sufficient magnitude to satisfy the most enthusiastic of its devotees." In Southern California, there are six hundred men who are engaged exclusively in bee-keeping, and yet they get a full crop on an average but once in three years, and some years thousands of colonies starve to death. While here in Florida I can not find any one that has ever known the crop to fail. This has been called a poor year for bees, yet my colonies have increased over 100 per cent. and produced 200 pounds of honey to the colony. The bees of several of my neighbors have done nearly as well. All are not fitted for bee-keepers, neither will all parts of this State produce honey in paying quantities, yet there is room for hundreds of industrious bee-keepers to come and locate where they can do annually as well and better than I have this year. For several reasons I think it probable that a larger per cent. of the apiarists of Florida reported to Mr. Newman than from most of the other States, so we will call the number one-sixth, which is certainly within bounds. Now multiply the 187,652 pounds of honey reported, by six, to get the approximate production of the State, and we have 1,125,912 pounds, worth \$168,866.80. Perhaps a better idea of this amount may be had by stating that the editor of the *Florida Dispatch* (who ought to be a good judge) estimates the orange crop of the State for 1881 at 300,000 boxes of 140 oranges to the box, worth at \$15.00 per thousand (about the usual average price obtained) \$675,544, or not four times the value of the unnoticed honey crop. Hundreds of young orange groves are just coming into bearing, so that a few years will show several times our present production of the golden fruit. In the same ratio may our honey and beeswax crop be made to foot up among the millions of dollars' worth annually, if those who are fitted for the business will only take hold and make a *study* of the business, instead of trusting to the old "happy go lucky" way. The climate of Florida is not only peculiarly fitted for successful bee-keeping, as our harvest time is long, and we have no wintering troubles, but it also attracts many people from the North who come here seeking health without the strength to do heavy work, or the capital to hire it done for them. To such bee-keeping offers many inducements.

As Vice President for the State of Florida of the North American Beekeepers' Society, I would respectfully call the attention of the Directors of our various State and County Fairs, and also that of the apiarists of the State to the above remarks, and ask them one and all to "put a shoulder to the wheel," and help to make bee-keeping one of the great money re-

sources of this "land of flowers," in every legitimate way possible. Let us have liberal prizes offered at our fairs for bees and their products, and let the bee-keepers strive with each other to make the best display of their stock. Much may also be learned by forming bee-keepers' societies and holding conventions one or more times each year, where all can meet together and exchange ideas, and display their hives, extractors, extracted and comb honey, etc.

New Smyrna, Fla., Oct. 31, 1881.

P. S. I see no better way of settling up the coast and river country of all South Florida than by encouraging bee-keepers to come and locate where they find every requisite of success. As we depend almost entirely on wild pasturage for our bees, a wild, unsettled country is as good or better for an apiarist than any other, provided it be on the coast or some water course that will give him transportation in his own boat to some point of public transportation. In all South Florida there can scarcely be found a spot near the coast or some river, but what would be a profitable one for the bee-keeper. There also is found the land best suited to the orange, and as apiculture and orange culture are peculiarly fitted to go together, the apiarist can, during his leisure hours, clear a piece of land and plant it to trees, thereby forming a permanent nucleus for a future settlement.



MISCELLANEOUS.

A Standard Frame.—The annual meeting of the British Bee-Keepers' Association, was held last month, and the following is a digest of the proceedings on this subject:

The most important motion affecting bee-keepers and bee-keeping generally was brought forward by the Rev. George Raynor as follows: "That it is desirable that the British Bee-Keepers' Association do set forth a standard frame, stamped by its sanction and authority, with the view to bringing such frame into general use, its size and form to be determined by a committee appointed for that purpose."

The question of a standard frame for general use has been discussed by all leading apiarists for a considerable length of time, the general opinion being that the matter should be taken up by the British Bee-Keepers' Association.

Mr. Raynor in introducing the motion spoke as follows: The resolution is one of no small importance to the bee-keepers of this country, and indeed I may say to all who are technically or otherwise interested in the

art of bee-keeping. I will endeavor to state a few of the more prominent advantages such a frame should possess. First would be the interchangeability of all frames. How great a boon this would be I must chiefly leave to the makes of hives and the vendors of bees to tell you. This point cannot well be over-estimated, especially now that bee-culture is being taken up so extensively by some of our leading farmers.

A few days ago I received a letter from a cultivator of many acres in Lincolnshire to the effect that he was investing largely in bee-culture, and upon modern and approved principles. And what a field is opened to the bee-keeper by the thousands of acres of mustard with its fragrant golden bloom which this plant affords, the fields of white clover, and other mellifluous plants?

We must all rejoice that the farming interest at last is showing signs of a growing appreciation of this long-neglected industry; and in this view how highly necessary is it that, far more so than at any other period, that we should have a standard frame, as affording the greatest facility for the transfer and sale of bees, hives, and appliances. Honey extractors would come into more general use, since one size alone would be required, and their use would be greatly extended.

Now a "standard frame" does not imply a "standard hive." The hive may be of any size—i. e., may contain any number you please of standard frames, hence the desirability of making the frame, and not the hive, the standard. Hence also it would appear best to state inside dimensions of frame, since some may prefer to use stouter material for frames than others, and it is important that the comb-surface should not vary.

"As regards our shows, I would say, do not make your 'standard frame' a *sine qua non* for hive competitions, but give it the preference *cæteris paribus*. It may be expected that I should state my own views of the size and form of frame most desirable, but this, I think, is a matter that may be well left to a committee to deal with. I may, however, say that the general view appears to be that a shallow rather than a deep frame should be adopted, providing the depth be not less than $8\frac{1}{2}$ inches, nor the length than $12\frac{3}{4}$, in order that the frame may receive six 1 lb. sections.

The shape I think of less importance, although as giving a decided preference to a tapered frame I should advocate a 'double standard,' in other words a rectangular and a tapered frame of the same superficial contents, and from what I have stated above, the size would most nearly approach the Woodbury frame. Shallow frames are most easy of manipulation, better for extracting, are more easily suspended in a vertical position in the hive, and there is no necessity for those abominations or queen-destroyers, called racks, to keep them in their places. It is said that bees winter better in deep frames, but with our modern appliances for winter and the contraction of the hive this

objection has no force. Heat ascends, therefore with a deep frame, when the bees cluster at the top of the frames, the space below will be filled with cold air."

The motion was seconded by Mr. T. W. Cowan, and after some discussion was adopted unanimously. The following gentlemen were nominated as the Committee to carry out the resolution: Mr. C. N. Abbott, Mr. T. W. Cowan, Mr. F. Cheshire, Mr. J. G. Desborough, Mr. J. M. Hooker, Mr. A. Neighbour, Rev. G. Raynor, Rev. F. T. Scott.

Bee Pasturage.—The *Semi-Tropic California* has the following on this subject:

Very soon the warm, dry weather will come and the planting of trees for permanent bee pasturage should be attended to without a day's delay. Some experiments point to the Loynot or Japanese plum as a very valuable honey producer, blooming in the fall or winter and producing a fruit that is unequalled for jelly making. It withstands the frosts and is an ever-green, that is ornamental as well as useful. It would not perhaps be out of place to again call attention to the value of the acacia; besides the bloom it yields, which furnishes both pollen and honey, the timber is valuable as fuel, being equal if not superior to willow, and the wood being very light and white is just the kind of timber to convert into sections for comb honey; it can be prepared for that purpose on a good foot power buzz saw by any handy bee-keeper at home at spare times, thus saving a money outlay that has been a considerable item in the bee-keeper's expense account heretofore. It will, on ordinary good soil, grow to the size suitable to such purposes in two years from the planting of the seed, which should be put in the ground in the month of March. Blue gum is another tree of equal if not greater value, both on account of its honey producing qualities and its timber. The handling of the plants must necessarily require more attention than the acacia, but it will well repay the attention and expense bestowed upon it, as when once well rooted it will grow even in poor, sandy soil, and in a few years afford timber and fire-wood; and the time usually spent by the bee-keeper in clambering over crags and cliffs, and up almost impassable canons to secure his supply of fuel, if judiciously used in tree planting would afford a better result for his work, besides furnishing his bees with honey close at hand year after year, and but little if any danger of failure on account of dry weather. When the blue gum is cut down for any purpose, it will immediately sprout from the root and make a vigorous growth. This is not so with the acacia; but as it is no more trouble to grow it from the seed than to grow corn, the bee-keeper should not complain. As soon as the danger of spring frosts are over, plant. The delicate and agreeable fragrance of mignonette, which is imparted to the

honey produced from it ranks it as of first importance among the flowers to be cultivated by the bee-keeper. During the month of March, or as soon as danger from frost is gone, sow the seed and spare not; be assured that nothing is better for bees, and very few if any blooming plants are better suited to our climate than mignonette.

Reversible Frame.—Mr. F. W. Burgess, Huntingdon, L. I., writes to *Gleanings* as follows on this subject.

At the convention recently held in Battle Creek, Mich., L. C. Whiting read a paper about the coming hive with reversible frames, etc., originated by Van Deusen, of Sprout Brook, N. Y. It may interest some to know that, a year ago, I made frames reversible, and have experienced the benefits enumerated in this paper. It can be applied to any frame with comb in, if desired. I have my material cut for frames for next year, and all are to use the metal arm. I use the L. frame with wires; for the support in the center, I use a strip $\frac{3}{8}$ wide, of picture-back stuff—and by its use secure openings by its side through the cards for winter passages. I have always pressed the wires into



the wax by the use of an "excavator" (everybody will know what that is, if they have ever been to a dentist), bending the point to an angle of 45 degrees, and on that foot cutting a slot to ride on the wire. Your button-hook arrangement is the same.

One great advantage of the reversible frame is to secure the comb well drawn out, and attached to both top and bottom bar.

I will suggest, that with my frame there is but little chance for the bees to stick them down—a metal arm resting on a metal rabbet. Again, it will always hang perpendicularly, there being but one place of contact; and if desirable to raise the frames from the bottom-board for winter, it is easily done by placing blocks under the lower arm.

By turning one arm under the bottom-bar, the other is secured fixed for hanging on the rabbet, and *vice versa*.

Spring Dwindling.—The *London Journal of Horticulture* remarks as follows:

Some bee-keepers are taking alarm at the large numbers of dead bees found in front of certain hives. These are generally cases where a large proportion of the stores had either been of unwholesome quality, as honeydew, or had not been properly sealed in autumn from too late feeding. An examination will generally reveal an abnormal quantity of food. How significant the fact that bees, as well as plants, hasten to propagate their

species on the approach of danger to their own existence! There is a danger of such colonies working themselves to death. This is the American trouble known as "spring dwindling." The only cure for it is to remove all combs with unsealed or unwholesome stores, and supply others if they can be had of better quality, or give dry combs and sugar cake. At the same time contract the brood nest till the bees are crowded, and give any comb containing brood beyond what the bees can be crowded on, to any other healthy colony.

Bee-Stings.—Respecting the effect of bee-stings in rheumatism, a correspondent of *Gleanings* says:

About a month since, a neighbor, living about six miles in the country, called on me to go out and examine a colony of blacks that he thought the moth were troubling. While there the lady told me that bee-stings had cured her of rheumatism. She said that she had for a long time been so troubled with it in her thigh and hip that it was difficult for her to walk across the house. Last summer she and her sister undertook to transfer a swarm of bees from an old gum, and not being acquainted with that kind of business, never having seen the operation performed, they got terribly stung before they got through. She was so badly stung that it made her quite sick; but since that time she has not been bothered with rheumatism.

How to Start in Keeping Bees in Texas.—Dr. Wm. R. Howard, in the *Kansas Bee-Keeper*, says:

An apiary should be located within easy range of both prairie and timber, near some small stream, in order to have the advantage of the thicket and bottom, as well as prairie range. In the thickets and bottoms we have elms, wild plums, red-bud, raton vines, honey locust, and many other honey plants of minor importance. On the prairie we have the horsemints, milkweeds, etc. Horsemint is one of our very best honey plants.

The best way to get a start of bees here is to buy the blacks in box hives and transfer and Italianize them. Another way is to furnish hives and transfer on the halves. We have tried both plans and there is but little difference, where you don't go too far for the bees. We always bring our bees home in the boxes and transfer, either immediately before allowing to fly, or four or five days afterward, when they have become acquainted with their new location.

To Beginners.—The *American Agriculturist*, gives this good advice to the beginner:

Those who contemplate starting in bee-keeping the coming season should procure at once, and thoroughly master some one of the several excellent manuals that treat of bees. This

done, the prospective apiarist should subscribe for one of the apicultural papers, several of which are published in this country. The text book study will prepare one to read understandingly the paper, and by such reading a person will keep abreast of the improvements, and so will be in the way to take advantage of all that may help him. Apiculture is advancing rapidly, and he who does not keep informed will soon be left in the wake of his more enterprising brother. After a thorough study of the subject, it will pay well to visit some wide-awake bee-keeper, and spend a day or two with him. We are happy to state that one does not need to go far now in any part of the country to find such an one. Such a visit will do much to remove the timidity that one is apt to feel in approaching these insects. The book-knowledge will become practical, as the various truths and descriptions are illustrated.



For the American Bee Journal.

Some Slovenly Bee-Keeping.

REV. L. JOHNSON.

"How many colonies of bees have you?"

"Ten or twelve."

"How have they wintered?"

"I don't know."

"How have you prepared them for wintering?"

"I have paid no attention to them. I have been too busy."

Such was the substance of a conversation I had with an old bee-keeper, as I arrived at his house late one evening not long since. Frequently had he requested me to come to see him and talk about bee-keeping. Until a late hour at night we remained up and almost every subject connected with the interest was discussed in his way. But as he took no bee paper, and never attended our Conventions, I found him far behind.

Next morning early we were in his bee-yard following him around to receive "instructions." His hives were of all shapes and patterns; some in boxes, some in movable combs, yet the frames of no two exactly of the same size. The tops of most of the hives were leaky or warped so that dampness and snow was penetrating the inside every storm. Many of them were tilted back so that rain falling on the alighting board would run into the hive. Some pigs had been running in the yard all winter, and these had rooted up the ground around the hives until the entrance of some of them was nearly blocked.

Three or four of the best were sitting under a cherry tree, in which the fowls had roosted all winter, and the tops were covered two or three inches deep with their droppings, which was

being soaked into the hives and combs. When the hives were opened I found a little bunch of bees, perhaps a quart, old, black and sickly looking. When I told him I had hives with 10 or 11 combs covered, and young bees flying, he wondered why his did not do better, as he thought he had a good location.

This may be an extreme case, yet all over our land we find hundreds keeping bees who do but little better, yet these men say "bee-keeping does not pay." Suppose their sheep, hogs, or even larger stock were kept after the same fashion, who would expect anything but failure? These men are generally the most self-conceited men on bee matters of any we meet. They "have long ago learned everything about bees." "You can't tell me anything," etc. Some years ago, I sold one of these men 2 good colonies, and delivered them in good order; that winter he let them die for want of attention; next spring he reported around that I had not sold him good colonies, etc. I have no doubt many of our queen breeders and bee dealers have suffered in the same way. If anything is worth doing at all, it is worth doing well, and the proper care of bees will pay a larger return than almost anything else. If we possibly can, brother bee-keepers, let us try to convert our slovenly brethren from the error of their ways, and if we cannot, it will be an act of mercy toward our little pets, as well as beneficial to the craft, to induce them to quit the business entirely.

Walton, Ky., March 13, 1882.

For the American Bee Journal.

A Few Practical Hints.

C. A. HATCH.

To keep one-piece sections from breaking in bending, hold as many as you can conveniently grasp, edge up, over a pail, and pour boiling water from a tea-kettle on the places which are to be bent, and be careful and not wet the rest of the piece. The strips should all be laid so the grooved sides are one way; this gives a chance for the hot water to wet both sides nicely, and only just where it is needed. The advantage over steaming or wetting the whole piece is, the dovetailed ends are not wet at all, and therefore will not loosen after being driven together, by shrinking.

Have always run my bees for extracting, and never used many sections; but prefer the one-piece to any other tried. I think they are nicer, stronger, and quicker put together; do not remember ever breaking one treated as above. A light mallet is the best tool to drive them together with.

Can fully indorse all J. W. Porter says in the *BEE JOURNAL* as to the age of foundation. Rather melt up after it is one year old and make over, than to use. Think the best plan to keep it would be to pack close in a covered box. Anyway, do not fasten into frames until most ready to put in the hive, and do not put in the hive

until the bees are ready to go to work at it, as the heat of the hive will harden it more in one day than one month in a close pile, not exposed to the air. Too damp a place will not do; have had it mold and spoil even in a dry cellar.

To make a fair test of different kinds of foundation, it should not only be of the same age, but made of the same kind of wax. We had some nearly spoiled last year with rosin: not over $\frac{1}{4}$ ounce to the lb. of wax. The bees were sharp enough to detect even that small amount, and why not the same with other foreign substance?

I prefer moulded foundation to rolled; have never used any made on a press.

Ithaca, Wis.

For the American Bee Journal.

Bee-Keeping in Nebraska.

J. B. SKINNER.

Being a merchant and publisher my time is pretty well occupied, but with the peculiar inspiration of scientific apiculture, I am constrained to keep a few bees for pastime and experiment, as the sequel has proven a time or two, perhaps "experience" would be the better word.

This section of country (Southern Central Nebraska) is reasonably well adapted to bees, though the past season was here, as elsewhere, too dry for more than a moderate yield of honey. My bees came through last winter very much like those of many other bee-keepers, losing 100 per cent. of the total (24 colonies) attributable, of course, to the terribly severe winter—how convenient to have somewhere to place the responsibility!

In the spring another colony was procured and divided into 6 during the season, which were put into winter quarters in good order, and are yet doing well, as the unusually mild weather has given them opportunity to fly every few days, showing a strong and healthy condition.

As the country here is new, bees are scarce (I have knowledge of but 6 or 8 colonies and none nearer than ten miles of my location) hence we have discussions, and other convention proceedings, and interchange opinions, and observations, through the bee papers only, so the BEE JOURNAL, the single bee paper I am taking at present, has a pretty thorough reading here.

Reading Mr. T. C. Mace's experience with stings in the JOURNAL for Feb. 1, I was reminded of a similar experience myself during the past summer; stings usually hurt me but little, but on this occasion I had been standing in a stooping posture for some moments, causing a flow of blood to the head; the day was intensely hot, and perspiration flowed freely, when a little "pet," with "malice aforethought," injected her "beautiful, polished shaft" into the side of my nose, it was brushed away without hesitation, with no thought of more than momentary pain. Within five minutes, however, my face and

mouth were so swollen that I could scarcely see or speak, a few moments later my hands and feet were swelling, and my heart palpitating so severely that much effort was required to breathe. My "better half" becoming alarmed began a liberal application of Centaur liniment, the first remedy she happened to find, and within 20 minutes after the first application, the pain and palpitation were entirely relieved, and the swelling rapidly reducing. Next day the sting was repeated on the same unfortunate organ, but without other than the usual result—momentary pain.

Inoculation proved of no avail in this first instance, but as to what spirits might have done I could not say; their value, however, is recognized in some instances, as witness the following:

A neighbor, while hauling rock some years ago, narrowly escaped being bitten by a rattle snake that lay coiled under a stone; he was very much unnerved, and after returning home, concluded to take an antidote—having purchased some spirits a few days before for making vinegar—like Mr. Mace, he imagined that it was beneficial, and deeming prevention better than cure, next morning, as he was starting to work, took another portion, and so on each day, and at the close of the season triumphantly declared that he had not been bitten once during the year; adding, half apologetically, that no vinegar was made though.

Mr. Mace might succeed equally well with it as a preventive, and thus save, not only the pain of the stings to himself, but the possible risk of death to Mr. Clarke to whom he refers, should the latter gentleman attempt to prove the question of inoculation.

Hardy, Neb.

For the American Bee Journal.

Honey from Corn.

M. MAHIN.

The correspondent of *Gleanings*, quoted in the BEE JOURNAL of March 8th is mistaken when he says that bees gather honey from corn. If he will watch the bees at work on corn tassels, as I have done perhaps hundreds of times, he will observe that they never pause on the flowers and apply their tongues to them as they do to flowers that yield honey. That the said correspondent is not a close observer is evident from the fact that he says the bees gather honey from corn at the time that they gather the dark green pollen. It is certainly not true that bees gather dark green pollen from corn. The pollen from that source is not dark green but light yellow, as anyone may observe when the corn is in bloom. Bees work on many flowers from which they never get a particle of honey, and among them are corn tassels.

Corn affords an abundance of pollen, and at a time when there are few other pollen bearing plants in bloom it is of considerable value, no doubt,

as the bees work freely on it. A careful observer can always tell whether bees are gathering honey or pollen only. If they keep in constant motion, as they do on the corn flowers, they are getting no honey. I have never been able to detect bees gathering honey from soft maples, and I doubt whether they ever get any from it. If they get any it is very little.

Huntington, Ind.

For the American Bee Journal.

Practical Use of Comb Foundation.

G. W. STANLEY.

Much has been said and written on the subject of comb foundation, and yet there is room for more remarks. When Mr. C. R. Isham, of Peoria, N. Y., took that decided stand in favor of comb foundation at the Northeastern Convention some years ago, I was using foundation made on the first mill that A. I. Root ever sold. From that time to this I have produced about 20,000 lbs. of comb honey, and my bees have never been left to fill a box without a full-sized starter of comb foundation. The foundation made on the above mill was very imperfect, in comparison with work done on machines now in use, as there was but very little wall, and the foundation then used for sections did not run more than 7 square feet to the pound, and, of course, there was some "fish-bone" in the honey; but I can say that my honey has always brought high prices, which statement will be indorsed by any of the leading beekeepers through this section, and I have never had a crate of honey come back on account of "fish-bone" or any other cause. When J. Van Deusen advertised the flat-bottomed foundation for sale, I stopped using the Root foundation in sections on account of not enough surface, and for the season of 1880 I used the Van Deusen flat-bottom, running from $8\frac{1}{2}$ to 10 feet per lb. This kind worked fairly while new and fresh, if the bees were getting just enough honey for comb building, as they would then have time to change the base of the cell, and as the wall was light the wax was all used up; but when honey came with a rush, as it does in our basswood flow, the bees would add wax to the base to make it the natural shape, and thus make the base much thicker than it was when it came from the mill. Now, on the other hand, when honey was coming in very slowly, or perhaps not at all, as is the case here when no basswood, if the foundation was a little dry and old, the bees would take it out at the entrance to the hive, while a piece of natural comb in the next box would be left untouched until fall honey commenced to come in, and the natural shaped foundation would be drawn out and filled with honey. When these truths had made themselves manifest, I began to look around for a mill that would make foundation 10 square feet per lb., with natural shaped base, and found what I wanted in the Vandervort mill for making

light foundation. If the work is properly and carefully done on this mill, the foundation will run 10 square feet per lb., and the base will be very thin and even, not leaving one part of the septum thicker than the other two parts, as you will observe in most other foundation, and at the same time the wall will be very thin and sharp, so that if honey came with a rush you will not get a chunk of wax in the center of each comb, as the base is as thin as the bees would have made it.

In speaking of brood-comb foundation I will be very brief, as nearly all bee-keepers are convinced of the necessity of it in order to get straight combs and to exclude drone comb, to say nothing of the great saving of time and honey that the bees would use in making their own comb. If foundation has a high wall, of the proper shape and weight, so that with a rather light base the foundation will run about 5 feet per lb., there will be no trouble from sagging. In my opinion, if this fact had been known 3 years ago, wired foundation would not have been used to any extent, as the wires made it much more expensive, besides being constantly in the way of taking out queen cells, etc. What first raised the complaint of foundation sagging in the brood chamber was the fact that it was made about 6 or 6½ feet per lb., and the wax was about all in the base, but the high-walled mill now obviates that difficulty, if proper care is taken in fastening the foundation in the frames.

Wyoming, N. Y.

For the American Bee Journal.

The Temperature of Cellars.

JACOB SPENCE.

I have been watching the BEE JOURNAL to see more particularly brought up the question (and answer to the question) whether indoor even temperature is really desirable or not. It seems to me more reasonable to believe, as the normal condition of bees wintering in hollow trees would be alternating sunshine and frost, that in bee-house or cellar they should, too, have such variations of temperature as would give them a chance to move and again compel them to cluster?

I value much to have a competent bee-keeper's opinion or judgment—at same time greatly prefer good reason given or well conducted experiment in support of consistent theory. I would vastly like also that we could have a well sifted and selected list of just how many things are undisputed in regard to wintering, if any? Or if not undisputed, at least generally accepted as essentials, toward bringing the creatures through with life. This looks to me where the dead-lock yet comes in. But surely the combined wisdom and experience now available, ought to be competent to clear away the mist yet around the dominion of wintering.

Toronto, Canada.

For the American Bee Journal.

Untested or "Dollar" Queens.

W. Z. HUTCHINSON.

MR. EDITOR: You say that scores of prudent breeders would, in some particulars, exceed the expenses as given in Rev. A. Salisbury's balance-sheet; if not too much trouble, give the details, showing in what particulars a prudent breeder could be more extravagant?

You speak of breeders making a specialty of tested queens, and availing themselves of the "untested" feature to work off worthless trash in filling orders for tested queens, provided, that the "worthless trash" produced bees with the requisite number of "stripes." I believe that some of our apiarists are waking up to the fact that the worst fault of a queen is not always that she produces hybrids.

You say: "We have long been convinced that 'warranted' or 'untested' queens were not only worthless, but an actual damage to the bee-keeping interest. In reply to this let me ask a question: Suppose that, about July 1st, any of our most reliable breeders had 100 queens that had just commenced to lay. (I know of only one breeder who rears his "dollar" queens differently from his tested queens, and that is Mr. Doolittle. He very explicitly states the fact in his circular, and I honor him for it.) If from such reliable breeder I should order 30 "dollar" or untested queens, and 30 of these young queens should be sent me; in ten days more I should order 30 "tested" queens, and, of the 40 remaining queens, 30 had been found to be purely mated, and they should be sent to me; now, Mr. Editor, which lot of queens do you think would be the best. I could destroy the mated queens, or, if I chose to keep them, would they not produce as good honey gatherers as the purely mated queen? But, you say the breeder can send out, as dollar queens, the ten hybrid queens that he has left. Granted; but the breeder who would do this would also send out superannuated and worthless queens, when filling orders for tested queens, if he had any such queens that produced three banded bees.

You say: "That it (the cheap queen traffic) does open a wide door for fraud no one can deny." A queen whose progeny shows the three yellow bands is sold as a tested queen, does not this also open a wide door for fraud? Suppose that the Ohio dealer had ordered 100 tested queens, and suppose further, that he had stipulated that they should be young queens and bred from an imported mother, if that western apiarist and queen breeder had seen fit to do so, could he not have filled the order with old or "culled" queens? In regard to these "sharp" breeders, who never miss an opportunity to send out old and worthless queens, isn't it a trifle strange that their names are never given to the public along with their boasts and "chuckles" over their dishonorable practices? In my opinion an honest

man is honest at all times, and under all circumstances, while a breeder that would cheat the purchaser of a "dollar" queen, would not hesitate to defraud a customer that ordered a tested queen.

Again you say: "But we do not believe, among them all, there is one who is reckless enough to expect to buy a single queen for \$1 or 100 queens for \$65 which would be fit to rear even untested queens from." Please turn to page 169 of the *Bee-Keeper's Exchange* for 1881, and you will find that H. P. Sayles writes as follows: "As an illustration of American untested queens, I will say I received 5 strong nuclei from Dr. Brown, of Georgia, price \$3 each. All the queens were superior in appearance. Of the untested queens above mentioned, one proved to be impurely mated. From two I reared a few queens which proved beauties in all respects, and but for the fact that their mothers cost but \$1 each, they would delight the eyes and fill the hives of our customers next season. As it is, they must remain and do service at home. Such experiences as the above, produce the call for the American bee. From my experiments, I should certainly prefer the dollar American from one of our reliable breeders, for breeding or any other purpose, to the untested imported queen."

I have purchased quite a number of both tested and untested queens, and I have found fully as large a proportion of good queens among the untested as among the tested, and I presume that other purchasers have had the same experience. Untested queens are shipped as soon as they commence laying, before the breeder knows anything in regard to their qualities, while tested queens are kept at least three weeks, and, if the breeder chooses to do so, he can keep, for his own use, the very best among them, leaving the second class queens to be shipped as "tested" queens.

I cordially agree with you, Mr. Newman, when you say: "What bee-keepers want is better stock, more honey, longer lived bees, and certain profits;" but I firmly believe that these results will never be obtained by testing queens in regard to "stripes;" and I am glad to see such men as Heddon, Alley, and Doolittle take the position that they have. If ever I felt like saying "amen," it was when I read the following, in Mr. Alley's article: "Queens should be reared and tested for business, and not for purity. In ordering queens the purchaser should say: 'Please send me a queen that you know to be very prolific, active, and vigorous; let her be pure Italian if possible, but send me a good one or none, as I want to obtain honey.'"

Mr. Alley says that he has more orders for queens than he can possibly fill, and yet he finds the rearing of dollar queens unprofitable. It would hardly seem proper for a young bee-keeper, like myself, to give advice to an old hand like Mr. Alley, but I presume that I may be allowed to suggest that he follow the course adopted a year or two ago, by Mr.

Oatman, of Ill., i. e., drop the dollar queen business altogether, and sell nothing but tested queens. He could thus continue in the business that has become "second nature to him," and could also make money.

Rogersville, Mich.

CORRECTION: About the middle of the second column, page 149, is a sentence that commences as follows: "I, at one time, had nuclei." It should read: "I, at one time, had eighty nuclei." W. Z. H.

[A reply to the above may be found on the first page.—ED.]

For the American Bee Journal.

Does it Pay to Rear Cheap Queens?

REV. A. SALISBURY.

It does seem to me almost any one can observe, that the advocates of untested queens rely but little upon their own arguments, as proof that the business is remunerative. Mr. Hutchinson asks the question, on page 149 of the BEE JOURNAL: "Mr. S., I ask if you have not indulged in too many spread eagle advertisements?" He also informs us when the flow of honey is scarce, he feeds cheap food—"It was grape sugar that I used for feeding." Of course, Mr. H. is not a sloven or stingy, that he does not like to see a neat advertisement, but economy says, "can't afford it on dollar queens." The same is also true of grape sugar (glucose). He knows, as well as any of us (from reports made on glucose), it is inferior and unhealthy food, compared with good granulated or coffee A sugar, or honey; but economy says take the dose—economy with Mr. H., and likely money in his pocket, but hard on the constitutions of embryo queens. If the reader will take the trouble to turn to Mr. H.'s article he will see, to make a good showing on untested queens, that Mr. H. puts all his increase of colonies at \$7 each, and all his surplus honey at 15 cents per pound. To me that is a new leaf just turned. He also acknowledges in that report that he allowed his expert nothing for time spent in rearing the queens; and it is altogether probable he boarded himself. A weak showing for an honorable, remunerative business.

Mr. A. G. Hill, editor of the *Bee-Keepers' Guide*, (once if not now an advocate of dollar queens), in the sequel of his review of the article referred to in the BEE JOURNAL, says: "And even with our economy and improvements, we can hardly make the price of a suit of clothes more than Mr. Salisbury." My balance sheet fell short \$12. This looks to me like a very small business—half a suit of clothes for a season's labor (don't forget the \$12 discrepancy in my balance sheet comes out of Mr. Hill's suit, which leaves him with half a suit, if he intended a \$24 suit). He evidently felt it was a poor showing for a remunerative business. It may do for a man of leisure, or boys that

have nothing else to do, but preposterous for a man of experience, with a family to maintain and children to educate.

It is true that the cheap queen traffic opens a wide door for fraud upon the purchaser. The presumable harm it has already done, yet doubtless largely lies cloaked behind the curtain. Like the glucose trade, it was a fraud in the beginning, which drove honest houses out of the sugar trade, and supplied the public with an inferior, unhealthy article as a substitute. Notwithstanding this may be the case in our business, it does not necessarily follow that all queens sold for untested are a fraud upon the purchaser. All tested queens come from those once untested. The truth in a nutshell is, first, it presents a strong temptation to the queen-breeder; second, he cannot make an honorable living dependent upon selling "dollar queens," and last, the purchaser runs a risk in getting a good queen.

While it is a fact, that all honest dealers discard and destroy all queens that present any external appearance of imperfection, yet imperfections are sometimes concealed from the eye, and after a queen has been tested, however valuable the mother and fine the stock, she is found not to be worth hive room, and no one to blame—it is the sporting of nature.

Camargo, Ill.

For the American Bee Journal.

Is Our Chemist Abroad?

J. H. MARTIN.

While reading your editorial, page 66, upon granulating glucose, I became disagreeably conscious that our chemist is not abroad with eyes and ears open, to learn the wondrous progress of the present age, and to keep the bee-keeping industry upon an even race with other and recently discovered industries. Here we have an industry and a product, the history of which we can trace back through the ages, that has not in its chemical features progressed one step. The honey that is put upon our tables, in the comb or liquid, is just the same as when Samson ate the comb honey from the lion's carcass, and lapped the extracted honey from his fingers.

But I hear some one say: My dear sir, what do you propose to do with our beautiful honey, are you not satisfied with the pure, wholesome, clean article, as now put upon the market? In answer, I may say: I am not; for I know there is a wide field here for improvement.

The first improvement I would suggest, is to bleach or extract the coloring matter from our dark grades of honey. Buckwheat honey seems to be the best subject to commence upon and I would inform our chemist, that a fortune awaits him, as soon as he will present to us the magic filter that will remove the disagreeable color, and give us a nearly uniform grade of honey. I think the proper time to attack the color is when the honey is first gathered and before it is sealed.

My next suggestion is to dry granulate our honey. That it can be done is hinted to us very strongly by dame nature herself, for every bee-keeper who has handled extracted honey, knows that small patches of honey upon the staves of the barrel will often be found in an apparently granulated condition so that it can be handled like dry sugar. Will our chemist tell us why these particular parts dry, and also tell us how to serve the whole barrel in like manner? The only experiment I can recall, that has been tried upon this problem, was by Mr. A. I. Root, several years ago. This peculiarity of certain grades of honey came to his notice and several parcels of candied honey were hung up in wire baskets, to dry, but I think the experiment was a total failure.

I could give other suggestions for improvements, as to the use of honey, but will leave the subject for our chemist to give us much needed information upon the chemical constituents of honey, the coloring matter, and the flavor.

The glucose industry, not a score of years old, has passed from one stage of improvement to another until a substance hard and bitter, and loaded with acids, is now to be put upon the market, with the bitterness eliminated and in granulated form; and although used as an adulterant in all other sweets, the spirit of improvement, which possesses the manufacturer is worthy of imitation by the bee-keeping fraternity.

Unless our chemist gets around lively, he will be left so far behind he will never win his share of the laurels of renown.

Hartford, N. Y.

For the American Bee Journal.

Manufacture of Comb Honey.

H. S. HACKMAN.

MR. EDITOR:—I thank you for the kind notice given to my last communication on Honey in Sections. Hoping it will not be intruding on your good nature, by my again calling the attention of the first question, "Do people in large cities buy and use our beautiful section honey, and at the same time think they are using or eating artificial comb honey?" I think they do.

It was not my aim to prove or disprove the possibility or impossibility of making artificial comb honey, for that is a settled fact with me—it has not yet been done. But to prove to my honey producing friends that pure matured honey is bought and used largely by consumers, under the impression that it is manufactured honey. This false impression is partly brought about by unprincipled, over-anxious men in producing something new and novel.

I had the following conversation with one of our grain merchants some 2 years ago, which will partly explain my assertions. He said: "I saw a nice lot of comb honey at the Exposition building in Chicago, and so much

of it, you would be surprised; and it is made in Chicago."

"That is not so; for no one can make comb honey."

"They do make it, comb and all, for the man that had it on exhibition told me so, and I afterwards saw the place where they make it. I saw an immense pile in their show window."

But he had forgotten the street and number, so I could not trace the matter up.

Another reason why I am convinced of the above fact, is that while I have sold my honey from house to house, many people would look at the sections, turn them over and over, again and again, in the most surprising manner, and then ask: "Is this the way you put up comb honey?" I told them no; that the bees made it that way; that the bees gathered the honey always. Some seemed doubtful.

One more strong evidence: My friend who ate the artificial comb honey at his sister's table in Chicago, promised to send me a sample of it when he got back to the city, but the sample has not come to hand, and I have no doubt but that he found the honey he had eaten for artificial honey was the pure article, for it is two months since he was here.

Honey taken from bee-trees, log gums, box hives, and promiscuously thrown into tubs and carried to market, is so different from our nice clean sections of to-day, people can hardly realize the fact that our nice honey in sections is pure.

Section honey in country places is something new. Many people have never seen any. Producers always ship their best honey to the city markets, and the above statement explains the mistaken idea among city consumers. This false idea is detrimental to honey producing, but how can we remedy it?

Peru, Ill.

For the American Bee Journal.

"Do Bees Puncture Grapes?"

A. F. MOON.

The members of the Northeastern Convention, which recently held its annual session, very wisely discussed this question; much credit is due them, for a just and "wise decision."

For thousands of years the honey bee has been a companion of man, in the way of supplying him with the grandest luxury ever placed before an epicure. Bees have greatly aided in the fructifying of fruit in carrying pollen from "flower to flower;" it is needless to give the manner in which they were cultivated, and managed in olden times, but we will say that within the last thirty years, "came the promise of deliverance—the foreshadowing of the beginning of great things"—and that foreshadowing was the introduction of movable frame hives. Up to that period but little interest, comparatively, had been manifested, "except by a few, knowing the worth of this noble insect." Latterly came more important inventions, such as the honey and wax ex-

tractors, comb foundation machines and other valuable inventions, which gave this rural branch an impetus never before excelled in any country. All this has had the effect to place this commodity in proper shape to meet the approval of other nations who are striving to compete with America. While this great revolution has been going on, the little busy bees has, like the gigantic railroad system, spread far and wide, notwithstanding their great enemy, which is the worst of all, "the ignorance of man;" they have contrived to increase and emigrate to the far west. They have crossed the Mississippi, making their way westward until the Rocky Mountains are no longer their boundaries. Yes, this wonderful insect has pushed its way onward over the mountains and the plains, passing Dakoto, Nebraska, Colorado, Wyoming, Montana, Utah, Nevada, Idaho, Oregon, and the far Washington Territory; their march has been westward, and mostly in advance of the human family.

The wonderful growth in apiculture during the last 30 years has far excelled any thing in the world's history. The revenue derived from the bee excels any other branch of industry for the capital invested, and their nature and habits have become familiar to almost every school boy. Notwithstanding their long existence upon the earth, we have a class of men who are trying to banish them from the land by accusing them of "puncturing grapes, peaches and other fruit." How strange it is that the honey bee has been cultivated for so long a period and never learned until a few years how to open and suck the juice of fruit!

When this complaint was first made we had the curiosity to test it, although we had kept a large lot of both bees and grapes, yet never knew of any injury done to grapes, peaches or any fruit by them.

We selected from the Delaware, which, by the way, is one of the most tender of all varieties, placing them in an empty hive, and putting a colony of bees in the hive, but not a grape was punctured, but the bees died. I have frequently placed a bunch of grapes in front of a hive of bees when but little or no honey could be gathered, and have covered them with syrup; they would lick up the syrup but did not destroy the grapes, neither do we believe they can. If they possessed the power they would undoubtedly use it long ago, for they have been raised together, and we do not think the bees possess any more knowledge to-day than they did when first known to man. They have not changed—they work by the same rule, and are governed by the same law now, that they were 2,000 years ago.

It is somewhat astonishing to look upon the most refined and intelligent communities of modern times and behold the ignorance that still exists, and where knowledge should prevail, the ignorance of merely fashionable training are twins—Gog and Ma-gog.

If the question is to be settled whether bees puncture grapes, we

hope that practical disinterested men will be chosen; some great blunders have been made by those who claim to be practical scientists, which has caused the little bee to lose much of its character. A few years ago a man in New York tried to expel bees from the place because the bees sucked honey from his buckwheat.

Rome, Ga.

SELECTIONS FROM OUR LETTER BOX

Honey from Cotton.—My bees are doing well, gathering some honey, and are breeding up very fast. Maple, peach and plum trees are in full bloom; the weather is warm, and the little fellows are busy all day. I have 32 colonies, all in good condition. I have them all in movable frame hives; I would have no other. I use full sheets of Dunham foundation, and find the bees work on it readily. There is no other person in this locality using the frame hive, nor is there any Italian bees except my own. It is thought bees will not pay in this country, but I am going to give them a fair trial this year. I saw drones flying on March 12. I shall begin queen-rearing soon, and expect to breed some fine queens for my own use. I took last season as high as 80 lbs. of honey from one hive, made from cotton bloom. I send you a sample. I want to know how it will compare with white clover honey. The sample is not a fair one, as it was not extracted. It was strained from the comb. H. M. WILLIAMS, M. D.

Bowden, Ga., March 13, 1882.

[The sample came duly; but it is not as light, nor as pleasant to the taste as white clover.—Ed.]

Foundation Fastener.—Is Goodrich's machine, intended to fasten foundation in frames not wired? If so, will the sheets of foundation have to be but the whole size of frame? I should like to buy a machine that would fasten whole sheets of foundation in frames, that will not warp or stretch, when the bees commence to work on it.

HENRY FILLEY.

Castle Hill, Me.

[The foundation should be full size of frame—and may be wired or not.—Ed.]

Coral Berry Bush.—The coral berry bush grows wild here on hundreds of acres. It commences to bloom in August, and blossoms till late frost. Drouth does not effect it, and it is better than white clover. I have been observing it for 4 years, and find it grows anywhere, either on high or low land. It can be easily plowed out with a good team. J. E. SAMPLE.

Beman, Kan.

[We have several specimens, which have been sent from others.—Ed.]

The Uses of Glucose.—Mr. Editor: I think you are mistaken in your opinion about the uses of glucose—that its only use is to adulterate. The grocers of the country sell large quantities of a fine looking syrup in 5 and 10 gallon kegs, which is, I think, the genuine glucose. They call it down here "corn syrup," and do not pretend it is anything else. It retails at 65 cents per gallon. It is very clear, light color, transparent, with, to me, a sickish sweet taste. Most people are fond of it, many preferring it to the best sorghum syrups, and paying for it a higher price. It is utterly worthless for cooking purposes, and known to be so by the consumers. It is used only as a table syrup, and will be found in almost every house. Of course, the great mass of the people are ignorant of its true character, and believe it harmless and wholesome. There is only now and then a person who knows it to be worthless and unhealthy and who will not have it in their house. D. P. NORTON.

Council Grove, Kan.

[Being ignorant of its real character the people use it, but if they knew what they were eating, they would never think of using it. Is it not, therefore, a fraud and a snare, detrimental alike to health and life? And should its real character not be exposed in the interest of common humanity?—Ed.]

Drouth in Kansas.—Bees did well in this locality until the commencement of the basswood flow, after which they barely gathered sufficient for brood rearing, the drouth being continuous the entire season. As a consequence many colonies died of starvation, and are generally in a weak condition. JOHN Y. DETWILER.

Doniphan, Kan.

Syrian Bees.—I will give my experience with the Syrian bees, as I see that Messrs. Pike and Valentine have each given theirs. I do not rear nuclei for sale, therefore have no axe to grind. When Mr. Jones first imported the Syrians, in 1880, I purchased 8 queens, having but 9 colonies at the time, which made 8 colonies of Syrians and 1 of Italians, that fall. The winter of 1880-81 killed nearly all the bees in this part of the country, but 6 of my Syrians came out in good condition, having lost the Italians and the 2 weakest of the Syrians. The season of 1881 was a very poor season for honey, so all the bee-keepers say here, but my 6 colonies increased by natural swarming to 24, which are all in good condition at the present time, besides getting more surplus honey than Italians ever did for me. I find the Syrians splendid honey gatherers, working early and late; mine carry heavy loads of honey, and lots of them. Last fall, when I prepared my bees for winter, I found nearly every colony had twice as much honey as they needed to winter on, having the brood chamber full, with the exception of about 2 combs, which were

about half full of brood. I can handle my bees without gloves or veil, and not get stung any more than with the Italians. Give me the Syrian bee every time, even if the Marylanders have better ones. LIZZY HARTMAN.

South West, Ind.

Sweet Clover with Wheat.—Can I seed a piece of winter wheat this spring with sweet clover, without injury to the wheat, and the clover do as well as other clovers sown on winter wheat in the spring? We seed winter wheat in this country generally in the spring with clovers and timothy, and they do well. Bees are doing well in this locality. March 2d my bees brought in pollen. I have 75 colonies packed in chaff on their summer stands. We have had a very mild winter so far. ELI BROOKS, JR.

Center Road Station, Pa.

[Certainly; the growth of the sweet clover will be so slow the first season that the wheat will get out of its way, and the clover will take no harm from the wheat.—Ed.]

Red Clover Queens and Bees.—Much is said about red clover queens, or queens that will produce worker bees that will gather honey from red clover, but I don't see anything strange about having such queens. My bees gather honey from the first and second bloom every season. Some seasons they gather half of my crop of honey from red clover. Every queen in my two apiaries will produce worker bees that will gather honey from the first bloom of red clover in Western Maryland. D. A. PIKE.

Smithsburg, Md.

Kentucky Bees All Right.—I send the glorious news of a safe passage, without the loss of 1 colony out of 28. Last winter I lost 21 out of 33. Bees have been bringing in pollen for 2 weeks. On the 9th of March I noticed a number of peach trees in bloom nearly opened to full size. I opened some colonies on the 5th of March, and found young bees capped, brood and eggs, all in abundance. One had some drone brood capped. At this rate, I expect swarming to commence early in April. The BEE JOURNAL improves all the time. G. W. ASHBY.

Valley Station, Ky.

Bees in Better Condition than for Many Years.—One year ago I lost all my bees except 3 colonies. I had nearly 50 colonies. I have just bought 7 more good strong colonies. Bees are in better condition this spring than they have been for many years.

W. G. PORTER.

Weston, Mich., Feb. 9, 1882.

The Outlook the Best for Years.—Our bees have wintered well, and are now gathering honey fast. The outlook is the best for years.

W. K. MARSHALL.

Marshall, Texas, March 16, 1882.

A Veteran Bee-Keeper.—I commenced bee-keeping when 18 years old; and have kept bees since. I am now 74 years old; was born in North Wales in 1807, and came to America in 1832. I have taken much pleasure in working in the apiary, and have made it pay very well some years. Please tell me what are Albino bees?

WM. ROBERTS,

Vaughansville, O.

[We believe they are the result of carefully breeding the lighter strains of Italians, until their peculiarities have become a fixity.—Ed.]

Feeding Syrups.—I wish to inquire if the syrup which has a soda or potash taste is fit to be used to feed my 10 colonies to induce early swarming? Our grocers call it clover honey syrup. It has an abominable taste when eaten on warm cakes. C. M. CLARK.

Lincolnsville, Pa.

[Clover honey syrup is probably only another name for glucose or grape sugar. Do not feed your bees on anything you would be unwilling to eat yourself, unless it be something you know to be a natural production. Better mix honey with warm water, or make a syrup of pure cane sugar.—Ed.]

Experimental Wintering.—I am trying to winter my bees by three different methods in order that I may solve the winter problem; 33 are packed in chaff, which are wintering finely, and they have had several good flights; two I placed in the cellar on Nov. 22, and are doing well; 58 are buried in the ground. I shall be unable to ascertain their condition until I take them out. Should you want to know the result of the three different methods, I will inform you by the 1st of May. Many are anxious about the burying process, and are coming several miles when I take them out. I think of sowing an acre of mammoth mignonette, together with sweet clover. I like the present form of the BEE JOURNAL much better than last year. I value it more and more every day. G. H. ADAMS.

North Nassau, N. Y.

[By all means, give the public the result or your experiments, and the conclusions you arrive at.—Ed.]

Bees in Kansas.—Bees have wintered finely in this region. I know only of three colonies having perished during the past winter, and they were weak and died from starvation. A little care would have saved them.

J. W. MARGRAVE.

Hiawatha, Kan. March 14, 1882.

Lost One out of Fifty-three.—Bees have come through the winter well, so far. I have lost 1 out of 53, but the bees went up into the upper story and starved on empty combs during the first cold spell. JOHN F. FRY.

Ronceverte, W. Va., March 10, 1882.

Clipping Queen's Wing.—Is it a good plan to clip the queen's wing to prevent the bees going off; and if clipped, how far from the hive will they go generally, when the hive is close to the ground, and where would the bees cluster? Would they find her on the ground or return to the hive? I put my bees in the cellar on Nov. 11, the temperature of which has been very regular at 42° since, with one thickness of cotton over the frames and no cover on, and they have had no flight except 1 colony that became uneasy. I gave those a flight in the shop, as I could not do so out-of-doors. I found them very strong with plenty of honey, and brood, in all stages on 4 combs, and about 2 quarts of bees behind the division board. I gave them more room, and returned them to the cellar. I intend letting the balance alone, unless they get uneasy. Is that a good or bad record?

WM. A. PEARSON.

Lacolle, Queb., March 6, 1882.

[If you cannot give your bees constant attention, it is a good plan to clip the queen's wing, then when the bees swarm out she will get but a few feet from the hive when the bees, discovering her helplessness will some of them cluster on her on the ground, while the others will mostly return to the hive from whence they emerged; some may go into other hives. Should you find her on the ground, destroy the queen cells in the hive and return her. Your record is good, but with so much breeding going on they will soon get uneasy, and be better out-of-doors.—ED.]

A Reversible Frame.—I am using a simple invention by which any square frame can be reversed, or either side turned up or down in an instant, also any other frame having square corners, such as the Langstroth, can be reversed immediately. This is of great advantage where bees are inclined to store honey along the top bar. I would like to hear from you and others on this point. My bees are in excellent condition. One colony has about 8 or 10 square inches of drone brood capped over, and five frames of brood mostly capped. I fear the present "cold snap" may destroy some of the brood. I, like Mr. Alley, am glad to see the "dollar" queen question brought up. From my experience I am satisfied that it will not pay to rear queens for \$1, nor to "warrant" a queen for \$1.50. Although I think your classing warranted queens with untested as equally worthless, is hardly fair; at least the warrant I give them, for they should be not only warranted to be pure, but prolific and good queens in every respect, but they cannot be reared for less than \$2. I hope this question will be agitated until buyers will see that it is to their interest to pay a reasonable price for a good queen, tested not only for purity but business.

L. C. MCFATRIDGE.

Carroll, Ind., March 13, 1882.

Foundation Holder.—I send you a frame ready to put the foundation in, with a frame to hold it. A piece is sawed out of the top-bar, beveled a little; turn that piece the other side up and that brings the two sharp edges together, by looking at the end of the top bar you can see; I have left one end piece off so that you can see how it will take hold of the foundation. I have tacked the frame to the board so that it will not rattle around in shipping, loosen the frame from the board by drawing the tacks, then take off the bevel piece; lay on the foundation, put the bevel piece on the top of the foundation; crowd the piece down sufficiently to hold the foundation; put in two or three tacks and then you have it fast, and if you ever want to cut the old comb out and put in new, take off this piece, put in your foundation and tack it back, and it is all right. It is but little work to make the top bars of the frame like this, for every one keeping bees has, or ought to have, one of Barnes' foot power saws.

H. W. CONKLIN.

Rockton, Ill.

[The implement is an ingenious contrivance for holding the frame firmly, and the foundation straight, while tacking the strip to the top-bar to hold the foundation.—ED.]

How I Bind the Bee Journal.—Having adopted a cheap plan of binding the BEE JOURNAL, I will give its readers the benefit of it. I take it for granted that every subscriber is keeping all the numbers on file. I use two strips of leather 6 inches long by ½ inch wide, and cut 2 holes in each near the fold at the edge of the paper. I cut holes in the paper and insert in each a shoe lacer; as soon as a number is received it is filed, and at the end of the year they are all bound at a cost of 1 cent. Bee-keepers of Connecticut, let us organize a State Society. I will put my name on the roll.

FRED. OFFINGER.

Stamford, Conn.

What a Contrast.—Last spring we were all lamenting for the dead bees, ready to exclaim, put me in the list of "blasted hoppers." This spring we are all rejoicing, thinking, when we send in our report next fall, it will be a "whopper." Judging from the present condition of my bees, they will swarm early in April. What a contrast from last spring! When I put my bees into winter quarters on Nov. 10, I weighed each of the 50 hives, the total weight being 3,100 lbs., making an average of 62 lbs. each. On March 1st I weighed them again, the figures being 2,750 lbs., making an average of 55 lbs. each, the average consumption being but 7 lbs. per colony. Who would have thought a hive of bees could have lived 110 days on 7 lbs. of honey? Hardly an ounce per day; and all are on summer stands at that. Who wouldn't be a bee-man? I wouldn't give my bees and fancy poultry for a little gold mine.

J. F. KIGHT.

Poseyville, Ind., March 13, 1882.

Profits for One Year.—For several years I have run a farm and apiary together. Last year I had my farm worked on shares, and gave my time and attention to the bees with the following result: Commenced the season of 1881 with 72 colonies; increased by natural swarming to 120; have sold 7,422 lbs. of comb and 749 lbs. of extracted honey, for which I received \$995.06; my expenses were \$118.70, which leaves \$876.36 for my work. I had empty hives and honey racks left from 1880. I would advise those who think of sowing sweet clover for hay to try a little at first, as it makes pretty coarse hay; but is one of the best of honey plants. There are two kinds—white and yellow blossom; the white yields very white honey.

W. S. WARD.

Fuller's Station, N. Y.

[The white sweet clover (*Melilotus alba*) is what is wanted by bee-keepers. The yellow blooms 2 to 3 weeks earlier than the white, but we have never seen a bee working on it, either for honey or pollen. However, we had but a few stalks of it on trial, and, of course, this was not a satisfactory proof, as bees will frequently neglect a few stalks of even the best honey plant, to work on more profuse bloom of some other and not so good a kind. We destroyed the yellow-flowered sweet clover before it went to seed.—ED.]

The Winter in Nebraska.—After celebrating Christmas, while "on the wing," my bees were confined by colder weather till Feb. 2, when the thermometer went up to 54° Fahr. in the shade, and my bees had a good flight again. Since then they were out on the following days: Feb. 3, thermometer 60° F. in the shade; Feb. 5, 64°; Feb. 6, 74°; Feb. 9, 57°; Feb. 10, 62°; Feb. 11, 60°; Feb. 15, 70°; Feb. 25, 60°; Feb. 26, 60°. The lowest dip we had Feb. 18 and 19, when the thermometer stood at sunrise at 2° below zero, and on the 20th and 21st we had a snowfall of about 12 inches on the level, with thermometer 2° F. below zero. So far my bees are in a good condition, and fly but little even on very nice days, although they are strong and healthy.

WM. STOLLEY.

Grand Island, Neb. 28, 1882.

Doing Well.—Our bees are doing well; they gathered pollen on March 3d from soft maple. I will try and give you my report next fall. I have 7 colonies, increased from 2 last year, and intend to work one for honey to see what they can do with my help, and the rest I shall run for increase.

MORRIS ROSSITER.

Sunbury, Pa.

Bees Feeding on Pudding and Molasses.—I wish to say to Mr. Heddon that I think his experiment proves that bees will not winter well on

"pudding and molasses," for after sucking out all the molasses they can reach, on the pudding they will starve.

DR. E. B. SOUTHWICK.

Mendon, Mich., March 14, 1882.

How to Sow Catnip.—Please give the best way to cultivate catnip for bee pasturage—whether to sow in drills or broad-cast? I wish to sow from three to five acres, or more. Please give the particulars in the columns of the BEE JOURNAL.

T. S. ROYS.

[Plant in beds or drills, and transplant; or sow broad-cast, where it is permanently to remain.—ED.]

Dimensions of a Two-Pound Can.—Please give the dimensions of a round tin vessel which will hold just two pounds of honey? By answering through the BEE JOURNAL you will confer a favor.

MARSHAL STONEHOUSE.

Shirley, Ont.

[We cannot give the dimensions for just two pounds of honey, as there is a slight difference in weight; however, a round vessel 4 inches in diameter by 4 deep will about fill the requirement, allowing a little room for expansion in heating, while liquefying the honey from granulation.—ED.]

Profits \$25 Per Colony.—My profits in 1881 were \$25 per colony. My 4 colonies wintered without loss. I thank the BEE JOURNAL and Cook's Manual for all my success. I could not afford to do without either of them.

CHARLES MITCHELL.

Molesworth, Ont.

Molding Combs.—I have 3 colonies packed in a large box with chaff. They sweat so much that the combs and honey get moldy; otherwise they have wintered well. What can I do to prevent it? So far there are but very few dead bees. In the winter of 1881 I had 5 colonies; but they all died on account of mold and dysentery.

JACOB BOWER.

Dry Valley, Pa., March 8, 1882.

[Take the cover off your packing-box, remove all the upper packing, let the sun shine on the blankets till the moisture is evaporated from the hive, then replace the cover on the box, without replacing the packing over the bees, or, at most, with but loose hay or straw above them; then bore 1½ inch holes in front and rear of the upper part of the packing-box, to allow the escape of the moisture which may pass through the straw.—ED.]

The spring meeting of the Cortland Union Bee-Keepers' Association will be held in Cortland, N. Y., May 9th, 1882. M. C. BEAN, Secy.



Local Convention Directory.

1882. Time and Place of Meeting.

April 1—Barren Co., Ky., at Sinking Spring, Ky.

11—Eastern Michigan, at Detroit, Mich.
A. B. Weed, Sec., Detroit, Mich.

19, 20—Tuscarawas and Muskingum Valley,
at Coshocton, O.
J. A. Bucklew, Sec., Clarks, O.

25—Texas State, at McKinney, Texas.
Wm. R. Howard, Sec.

26, 27—Western Michigan, at Grand Rapids.
Wm. M. S. Dodge, Sec., Coopersville, Mich.

27—Kentucky Union, at Eminence, Ky.
G. W. Demaree, Sec., Christiansburg, Ky.

May 2, 3—Eastern N. Y. Union, at Cobleskill, N. Y.
C. Quackenbush, Sec., Barnesville, N. Y.

11—Champlain Valley, at Middlebury, Vt.
T. Brookins, Sec., East Shoreham, Vt.

16—N. W. Ill. and S. W. Wis., at Rock City, Ill.
Jonathan Stewart, Sec., Rock City, Ill.

25—Iowa Central, at Winterset, Iowa.
Henry Wallace, Sec.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The Union Bee-Keepers' Association will meet at Eminence, Ky., on the 27th day of April, 1882. A full attendance is very much desired, as important business will be transacted.
G. W. DEMAREE, Sec.
Christiansburg, Ky.

The Central Michigan Bee-Keepers' Association will meet April 20, at Lansing, in the Capitol building. Programme.—President's annual address, Rev. J. Ashworth; bee hives and fixtures, E. W. Wood; Cyprian bees, J. Harper; the coming bee, Prof. A. J. Cook; care of old combs, Stephen C. Perry.
REV. J. ASHWORTH, Pres.

The Champlain Valley Bee-Keepers' Association will hold their semi-annual meeting at Middlebury, Vt., May 11, 1882. T. BROOKINS, Sec.

The Texas State Bee-Keepers' Convention will hold its meeting at Judge W. H. Andrews' Apiary, at McKinney, Texas, April 25, 1882.
WM. R. HOWARD, Sec.

The spring meeting of the Mahoning Valley Bee-Keepers' Association, will be held at Berlin Center, Mahoning Co., Ohio, in the Town Hall, on Saturday, March 25, at 1 p. m., sharp. All interested in the science of apiculture are invited to be present and participate in the discussions of the day. The following questions will be discussed: "The merits of the different races of bees." "The best method of securing surplus honey." "Which is most profitable to the bee-keeper, comb or extracted honey?" An essay on pasturage or forage for bees will be given.

LEONIDAS CARSON, Pres.

The semi-annual meeting of the Tuscarawas and Muskingum Valley Bee-Keepers' Convention, will be held in the Town Hall at Coshocton, O., on April 19 and 20, commencing at 10 a. m. A cordial invitation is extended to bee-keepers everywhere.

J. A. BUCKLEW, Sec., Clarks, O.

The Barren County Bee-Keepers' Association meets at Sinking Spring school house, three miles west in Glasgow, Ky., on the first Saturday of April, 1882. All bee-keepers of the county are invited.

I. N. GREER, President.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL, }
Monday, 10 a. m., March 20, 1882. }

The following are the latest quotations for honey and beeswax received up to this hour:

Quotations of Cash Buyers.

CHICAGO.

HONEY—As the season is well advanced, sales of extracted honey are slow and prices remain unchanged. I am paying 8c. for dark and 10c. for light, cash on arrival. Good comb honey is scarce and rules high.

BEESWAX—I am paying 22c. for good yellow wax, on arrival; 18c. for medium grade, and 15c. for dark.

AL. H. NEWMAN, 972 W. Madison St.

CINCINNATI.

HONEY—The retail demand for extracted, in small packages, is fair, but only an occasional barrel is sold for manufacturing purposes. It brings 7c. on arrival. Demand for comb honey is only in a retail way, and only choice white is salable. It would bring 20c. on arrival.

BEESWAX—Brings 18c. The demand exceeds the offerings.

C. F. MUTH.

Quotations of Commission Merchants.

CHICAGO.

HONEY—Choice white comb honey is very scarce and commands 22c. per pound. Other grades, partly dark and dark are very slow sale. Extracted firm at 9c. 12c., according to quality and style of package.

R. A. BURNETT, 165 South Water St.

NEW YORK.

HONEY—There is a liberal supply of honey here for which trade is very little demand, and prices rule weak and irregular.

We quote as follows: White comb, in small boxes, 18c. 19c.; dark, in small boxes, 12c. 14c. Extracted, white, 10c. 11c.; dark, 7c. 9c.

BEESWAX.—Prime quality, 21c. 23c.

THORN & CO., 11 and 13 Devoe avenue.

BOSTON.

HONEY—Trade quiet. We quote at 20c. 22c., according to quality.

BEESWAX—Prime quality, 25c.
CROCKER & BLAKE, 57 Chatham Street.

CLEVELAND.

HONEY—The market remains unchanged; 1 and 2 lb. sections, of best white, sell readily at 21c. 22c.; glassed white, 16c. 17c.; buckwheat very dull at 15c. 16c. for unglazed. Extracted, small packages, 12c.; large packages, 11c. per lb.

BEESWAX—Scarce at 25c. 30c.

A. C. KENDEL, 115 Ontario Street.

SAN FRANCISCO.

HONEY—There is an entire absence of demand. Stocks are not large, but holders are anxious to clean up.

We quote white comb, 16c. 20c.; dark to good, 10c. 14c. Extracted, choice to extra white, 8c. 10c.; dark and candied, 7c. 8c. BEESWAX—23c. 25c.

STEARNS & SMITH, 423 Front Street.

ST. LOUIS.

HONEY—Dull and lower to sell; season about over. Strained offered at 8c. and unsold. Comb notably in fair demand at 18c. 22c.

BEESWAX—Stiff at 20c. 21c. for prime.

R. C. GREER & CO., 117 N. Main Street.

THE AMERICAN BEE JOURNAL

RATES FOR ADVERTISING.

20c. per agate line of space, each insertion.

A line of Agate type will contain about **eight words**; fourteen lines will occupy 1 inch of space.

Special Notices, 50 cents per line.

DISCOUNTS will be given on advertisements for the Weekly as follows, if paid in advance:

For 4 weeks.....	10 per cent. discount.
" 8 ".....	20 " "
" 13 " (3 months)....	30 " "
" 26 " (6 months)....	40 " "
" 39 " (9 months)....	50 " "
" 52 " (1 year).....	60 " "

Discount, for 1 year, in the Monthly alone, **25 per cent.**, 6 months, **10 per cent.**

Discount, for 1 year, in the Semi-Monthly alone, **40 per cent.**, 6 months, **20 per cent.**

Advertisements withdrawn before the expiration of the contract, will be charged the full rate for the time the advertisement is inserted.

Transient Advertisements payable in advance.
—Yearly Contracts payable quarterly, in advance.

THOMAS G. NEWMAN,

974 West Madison Street., Chicago, Ill.

Special Notices.

To Advertisers.—By reference to our schedule of rates for advertising by the year, it will be seen that considerable reduction has been made. This, in connection with our large and increasing circulation, makes it advantageous to dealers to avail themselves of its weekly visits to the bee-keepers of America to make their announcements for the coming season's trade. We not only offer the *best* advertising medium, but the lowest rates on yearly contracts.

The *Apiary Register* devotes 2 pages to each colony, ruled and printed, and is so arranged that a single glance will give a complete history of the colony.

For 50 colonies (120 pages).....	\$1 00
" 100 colonies (220 pages).....	1 50
" 200 colonies (420 pages).....	2 00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones to procure at the start.

To Promote a Vigorous Growth of the hair, use Parker's Hair Balsam. It restores the youthful color to gray hair, removes dandruff, and cures itching of the scalp. 11w5t

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the *BEE JOURNAL*.

Honey as Food and Medicine.

We have just issued a new edition of our pamphlet bearing the above title. It has been revised and enlarged from 24 pages to 32, the new pages being devoted to *new* Recipes for Honey Medicines, as well as all kinds of cooking in which honey is used.

It is undeniable that *pure honey* is the simplest, the healthiest, the most natural, and the most strengthening article of food for healthy persons, as well as the best remedy for the sick; and for the convalescent it is the true balsam of life, to restore them to their wonted strength and health.

What is needed is to educate the community up to this idea, and in no way can that be done so well as by directing their attention to the merits of honey.

This little pamphlet should be scattered by thousands all over the country, by honey producers. In this way it will create a home market in almost any locality.

We have put the price of them low to encourage bee-keepers to scatter them far and wide. Single copy 6 cents, postpaid; per dozen, 50 cents; per hundred, \$4.00. On orders of 100 or more, we print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

When 100 or more copies are wanted, they will be sent by express, at the expense of the purchaser.

When changing a postoffice address, mention the *old* as well as the new address.

A Sample Copy of the Weekly *BEE JOURNAL* will be sent *free* to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

We will send Cook's Manual in cloth, or an *Apiary Register* for 100 colonies, and Weekly *BEE JOURNAL* for one year, for \$3.00; or with King's Text-Book, in cloth, for \$2.75.

The *BEE JOURNAL* is mailed at the Chicago Postoffice every Tuesday, and any irregularity in its arrival is due to the postal employees, or some cause beyond our control.

Binders for 1882.—We have had a lot of Emerson binders made especially for the *BEE JOURNAL* for 1882. They are lettered in gold on the back, and make a nice and convenient way to preserve the *JOURNAL* as fast as received. They will be sent post paid by mail for 75 cents.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

It is a fact that horse dealers are buying horses with ringbones and spavins, because they can make money by using Kendall's Spavin Cure. 9w5t

"How do You Manage," said a lady to her friend, "to appear so happy all the time?" "I always have Parker's Ginger Tonic handy," was the reply, "and thus keep myself and family in good health. When I am well I always feel good natured." See other column. 11w5t

New Price Lists.—We have received new *Apiarian Catalogues* and *Price Lists* from the following:

J. W. Calder, Williamstown, Ont.
O. Foster, Mt. Vernon, Iowa.
E. L. Briggs, Wilton, Iowa.

Also the *Gardener's Guide* by Parker & Gannett, 49 North Market street, Boston, Mass.—an excellent seed catalogue.

Advertisements.

THE AMERICAN BEE JOURNAL is the oldest Bee Paper in America, and has a large circulation in every State, Territory and Province, among farmers, mechanics, professional and business men, and is, therefore, the best advertising medium.

Sweet Clover Seed Wanted.

I wish to purchase several bushels of Sweet Clover (*Melilotus alba*) Seed. Address, stating quantity and price, A. H. NEWMAN, 12w1f 972 W. Madison Street, Chicago, Ill.

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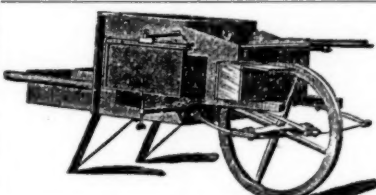
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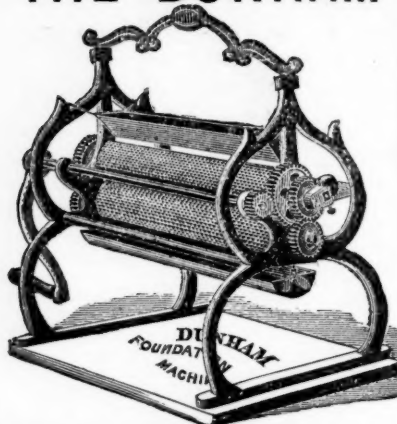
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